ROYAL LONDON
OPHTHALMIC
HOSPITAL

EVISCERATION.

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BY
A. E. PRINCE, M.D.
OF JACKSONVILLE ILL.

Read in the Section of Ophthalmology at the [illegible] Annual Meeting of the American Medical Association June [illegible]

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EVISCERATION.

It will be five years in September since Prof. Alf. Graefe, of Halle, delivered his address before the Society of Naturalists and Physicians at Madgeburg in which he described the operation of exenteration or evisceration, and asserted the advantages that it possessed (except in malignant diseases) over enucleation, viz.: that the danger of meningitis was avoided, and that a superior stump was thereby obtained. Besides the denial of these claims, by some it has been objected that the greater degree of pain, and increased amount of inflammatory reaction, together with the prolonged period of healing, were decided disadvantages to be taken into account.

It is not my purpose in this paper to review the arguments of the author regarding the advantages of the method; but first, to offer a consideration relating to the chief objection, that of the consequent pain; and second, to mention an observation which may prove of value in securing a further improvement in the character of the stump.

PAIN.

All the published accounts of the operation which have come to my notice agree in the acknowledgment, that the severity of the pain and the duration of the healing is materially greater after evisceration than is the case following enucleation. My observation in the first five cases was a corroboration of these statements. The

swelling was intense and the pain for several days was very great. Local application failed to afford relief, and morphia was required. At this period in my experience, stimulated by this discouraging feature, an effort was made to determine the cause of the pain. The anatomical fact that the long ciliary nerves lie in exposed grooves along the concave surface of the sclera, leading forward to the ciliary region, led at once to the hypothesis that the cause of the pain was the tension, pressure and inflammatory irritation to which these nerves were subjected.

To test the truth of this hypothesis the entire concave surface of the sclera was cauterized with pure carbolic acid immediately following evisceration in a case of extremely painful panophthalmitis consequent upon an incision, the suffering attending which had been intense for several days.

The result surpassed all expectations. The pain ceased with the operation. The degree of swelling was small and the patient was discharged in five days. Since this operation the number of eviscerations has been about twenty-five. The results have not been uniformly so brilliant. Sometimes the conjunctiva has become œdematous and been forced out through the palpebral aperture, but in no case, in which the cauterization has been efficient, has there been the type of pain which was remarked previous to the cauterizing treatment.

It is believed that the use of the acid in this connection is indicated

1. On account of its quality as an antiseptic.
2. Because it is an anæsthetic.
3. Because it is believed to close the apertures in the sclera, and thus prevent the escape into the orbit or sheath of the nerve, of any microörganisms which should escape the action of the acid.

4. Because the sensory nerves thus treated cannot respond in sensations of pain to the subsequent irritation and tension to which they are liable to be subjected.

STUMP.

The second question raised by critics is that of the nature of the stump.

That the question is one which deserves attention will not be denied. The inadequacy of the stump following enucleation needs only to be mentioned. Dr. Mules, of Manchester, England, struck a responsive sentiment when he published his observation on the use of the glass vitreous, in 1884.

The general feeling was that it would be a great step forward in cosmetic surgery if his method could stand the test of experience.

From the little that has since been said of it I am led to infer that the practice, which was at first so extensively resorted to in Manchester, has not met with extended favor. My experience in the use of the artificial vitreous in six cases was at first very encouraging, but later equally discouraging.

While the balls were at the commencement retained kindly and the patient seemed overjoyed at the excellence of the stump, this joy was converted later into grief in five cases of the six by the absorption of the line of union and the escape of the glass ball. Though my experience in attempting to secure the permanent retention of artificial vitreous is to be regarded as a failure, yet there was an element of instruction in it which I offer for your consideration. It was noticed in some of these cases that even though the glass ball was retained but a few days, it left upon its escape a distended sclerotic, infiltrated with form-

ative material which prevented the usual collapse, and enclosed a cavity which gradually filled with granulations and finally resulted in a stump which was fuller and more mobile than that following enucleation. Following the lead of this inquiry I was led from theoretical considerations, after cauterizing with carbolic acid, *to pack the cavity of the eviscerated globe with pulverized iodoform.*

The method which has been employed is to dry out the globe and, after pouring from a paper funnel into the cavity of the globe as much of the powder as it will contain, to tamp it with cotton on a cotton holder, making room for more of the iodoform, which also is to be lightly packed into the cavity. If packed too tightly the escape of the serum is impeded, and in that event, either forced to infiltrate into the orbit or extrude the plug of iodoform. Pursuing this process it has been observed in more than a dozen cases that the sclera remains partly distended by the iodoform, which may remain in position for several days or even weeks, in some cases.

In one case of recent injury in which I eviscerated, cauterized and packed with iodoform, on the following day no pain had been experienced and exceptionally no swelling had resulted. The patient was to notify me if he had any trouble. On the fifth day my assistant called and found that he had removed the bandage and taken a trip into the country. He subsequently objected to having the bandage reapplied, and was digging wells in another week. In his case a small plug of iodoform remained for three weeks and was finally crowded out by the encroaching granulations. An excellent stump possessing good excursion was the result. After three months, considerable shrinkage has occurred, but there is still a fair degree of prominence and good motion. In no

case in which iodoform has been packed into the sclerotic cavity has there been the least suppuration, which, to my mind, establishes the position of iodoform as an antiseptic, when it can be retained in contact with moist organized tissue, in the presence of which iodine is probably liberated.

The conclusion drawn from my experience is that, though the subsequent shrinkage is more than we would wish, yet, the resulting stump is sufficiently better than that following enucleation to lead me to prefer it in all cases, except in those of suspected malignancy, and those in which the fellow eye is deeply situated in the orbit.

Dr. Prince also exhibited a book for registering cases in which the ruling is so arranged that, by glancing at the page, it is possible to see immediately the number of cases of a given disease recorded.

Dr. Jackson stated that Dr. Williams, of Boston, was the first to record a case of evisceration. Dr. Williams was thereupon asked to speak on the subject.

Dr. Williams regarded the pain ensuing after evisceration of the globe as differing from the ciliary neuralgia previously felt, in having such a character as might be due to œdema and congestion of the conjunctiva and the orbital cellular tissue. He had been in the habit of evacuating completely the contents of the scleral cavity in cases of phlegmonous inflammation of the globe, and then—as also in excision of anterior portions of the globe in cases of anterior staphyloma or hydrophthalmia—of bringing the edges of sclera together with sutures. A very good stump, sometimes with little diminution in size of the globe, is thus obtained, which partly fills the orbital cavity and affords good support to an artificial eye.